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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,782	09/29/2003	Peter Nilsson	03370-P0046A	2485

24126 7590 08/23/2004

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EXAMINER

WILLIAMS, THOMAS J

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,782

Applicant(s)

NILSSON ET AL.

Examiner

Thomas J. Williams

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-20 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/21/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Acknowledgment is made in the receipt of the information disclosure statement filed November 21, 2003 and the oath filed March 8, 2004.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4 and 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,231,133 to Tsukamoto.

Re-claim 1, Tsukamoto discloses in figure 19 an electrically controlled braking system comprising: a control unit that generates control signals (interpreted as depression sensors 101F, 101R), a first brake component (interpreted as 10F) responsive to the control signals generated by the control unit; a second brake component (interpreted as 10R) responsive to the control signals generated by the control unit; a first control network electrically connecting the control unit and the first brake component (interpreted as communication line connecting 101F and 10F), the first control network is adapted to transmit the control signals from the control unit to the first brake component, a second control network electrically connecting the control unit and the second brake component (interpreted as communication line connecting 101R and 10R), the second control network is adapted to transmit the control signals from the control unit to the second brake component; an auxiliary control link (interpreted as communication link between 10F and 10R) is activatable to electrically connect the first brake component 10F and the second

Art Unit: 3683

brake component 10R when a failure occurs in one of the first control network or the second control network, the auxiliary control link is adapted to transmit the control signals between the first brake component and the second brake component when the failure occurs.

Re-claims 2 and 4, the control unit 101 comprises two control units; the control units are electrically connected with each control networks.

Re-claim 7, the first brake component and the second brake component each comprises a brake actuator.

Re-claim 8, the brake components, which encompass the brake actuators, are actuated by electrical force.

Re-claim 9, the first brake component 10A and the second brake component 10B are on a common axle, see figure 20.

Re-claim 10, the control unit 101 controls an electronic brake force distribution.

Re-claim 11, control signals are transmitted over both the first control network and the second control network.

4. Claims 1, 3, 5, 7-12, 14 and 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,810,454 to Prinzler et al.

Re-claim 1, Prinzler et al. discloses an electrically controlled braking system comprising: a control unit that generates control signals (interpreted as depression sensor 6), a first brake component 8a responsive to the control signals generated by the control unit; a second brake component 8b responsive to the control signals generated by the control unit; a first control network electrically connecting the control unit and the first brake component, the first control network is adapted to transmit the control signals from the control unit to the first brake

Art Unit: 3683

component, a second control network electrically connecting the control unit and the second brake component, the second control network is adapted to transmit the control signals from the control unit to the second brake component; an auxiliary control link 20 is activatable to electrically connect the first brake component 8a and the second brake component 8b when a failure occurs in one of the first control network or the second control network, the auxiliary control link is adapted to transmit the control signals between the first brake component and the second brake component when the failure occurs.

Re-claims 3 and 14, the control unit is a single control unit.

Re-claim 5, a third brake component 10a and a fourth brake component 10b are responsive to the control signals; a second auxiliary control link 22 is activatable to electrically connect the third and fourth brake component when a failure occurs in one of the networks.

Re-claims 7 and 16, each brake component comprises a brake actuator and an ECU.

Re-claims 8 and 17, the brake components, which encompass the brake actuators, are actuated by electrical force.

Re-claims 9 and 18, the first brake component 8a and the second brake component 8b are on a common axle, see figure 1, and are linked by auxiliary link 20.

Re-claims 10 and 19, the control unit 101 controls an electronic brake force distribution and ABS.

Re-claims 11 and 20, control signals are transmitted over both the first control network and the second control network.

Re-claim 12, Prinzler et al. discloses an electrically controlled braking system comprising: a control unit that generates control signals (interpreted as depression sensor 6), a

Art Unit: 3683

plurality of pairs of brake components, 28 and 30, each brake component is responsive to the control signals; a first control network is electrically connecting the control unit and the first brake component (interpreted as communication line connecting 6 and 28), the first control network is adapted to transmit the control signals from the control unit to the first brake component; a second control network is electrically connecting the control unit and the second brake component (interpreted as communication line connecting 6 and 30), the second control network is adapted to transmit the control signals from the control unit to the second brake component; a plurality auxiliary control links (interpreted as 20 and 22) is activatable to electrically connect the first brake component 10a of a pair of brake components (10a and 10b) and the second brake component 10b of each pair of brake components (a pair of brake components is defined as the components with the prefix "10", another pair of brake components starts with the prefix "8") when a failure occurs in one of the first control network or the second control network, the auxiliary control links are adapted to transmit the control signals between the first brake component or each pair of brake components and the second brake component or each pair of brake components when the failure occurs.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

Art Unit: 3683

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 2, 4, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prinzler et al. in view of Tsukamoto.

Re-claims 2, 4, 13 and 15, Prinzler et al. fails to teach the control unit as comprising two units. Tsukamoto teaches a control unit 101 as comprising either one (figure 9) or two (figure 19) individual control units. It would have been obvious to one of ordinary skill in the art to have provided the apparatus of Prinzler et al. with two individual control units as taught by Tsukamoto, thus providing a backup ensuring proper operation of the brake system.

Allowable Subject Matter

8. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Zittlau et al., Giers, and Riddiford et al. each teach an electric brake with various communication links.

Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is (703) 305-1346.

Art Unit: 3683

The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder, can be reached at (703) 308-3421. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

TJW

August 17, 2004

THOMAS WILLIAMS
PATENT EXAMINER

Thomas Williams

AU 3683

8-17-04